

The Maryland Certificate of Public Convenience and Necessity (CPCN) Process

Maryland Department of Natural Resources
Power Plant Research Program

Presentation Objectives



1. Explain the CPCN process and PPRP's coordinating role
2. Review renewable energy goals and land use impacts
3. Introduce the DNR/MEA SmartDG+ product

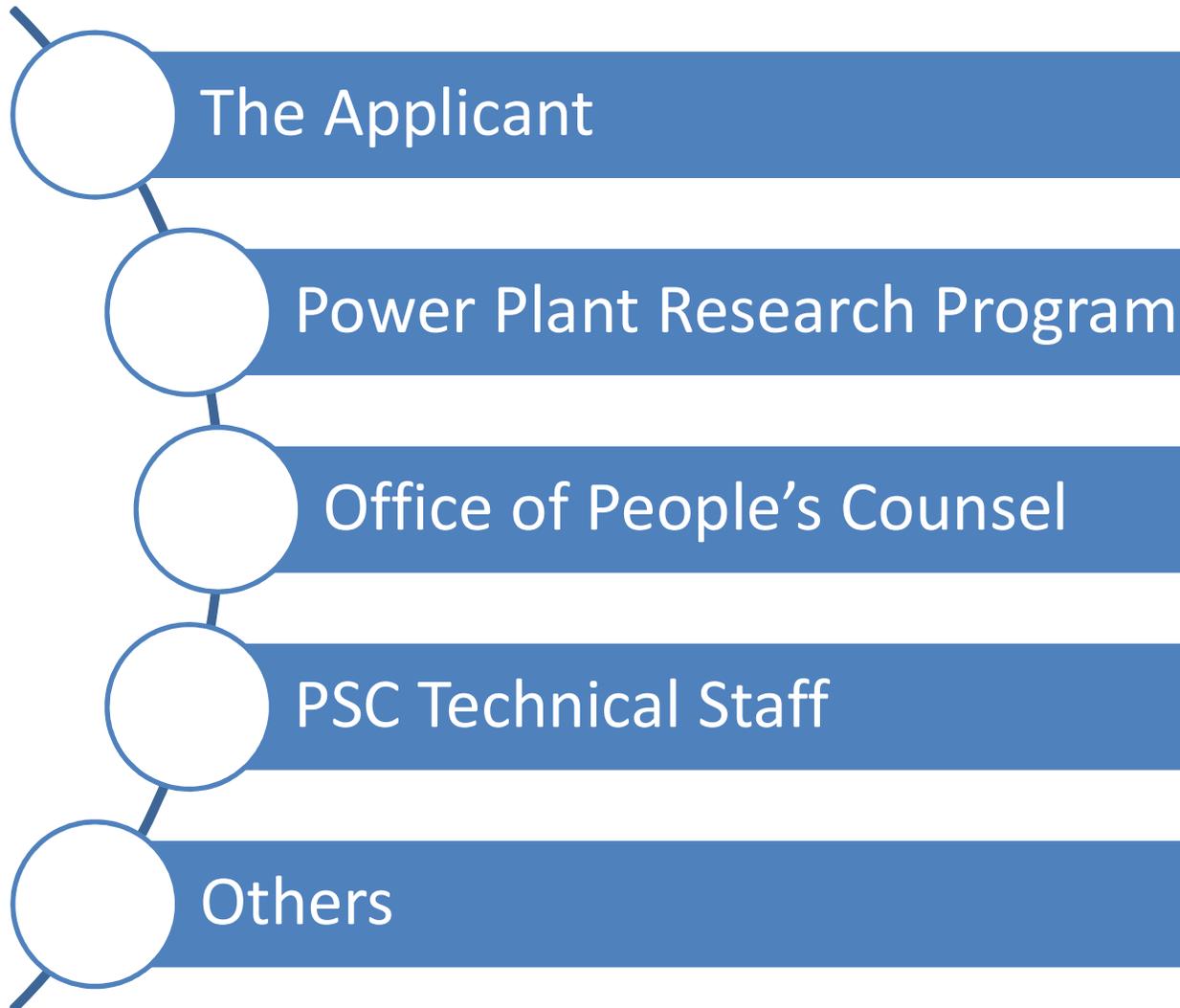
Required Permits and Approvals



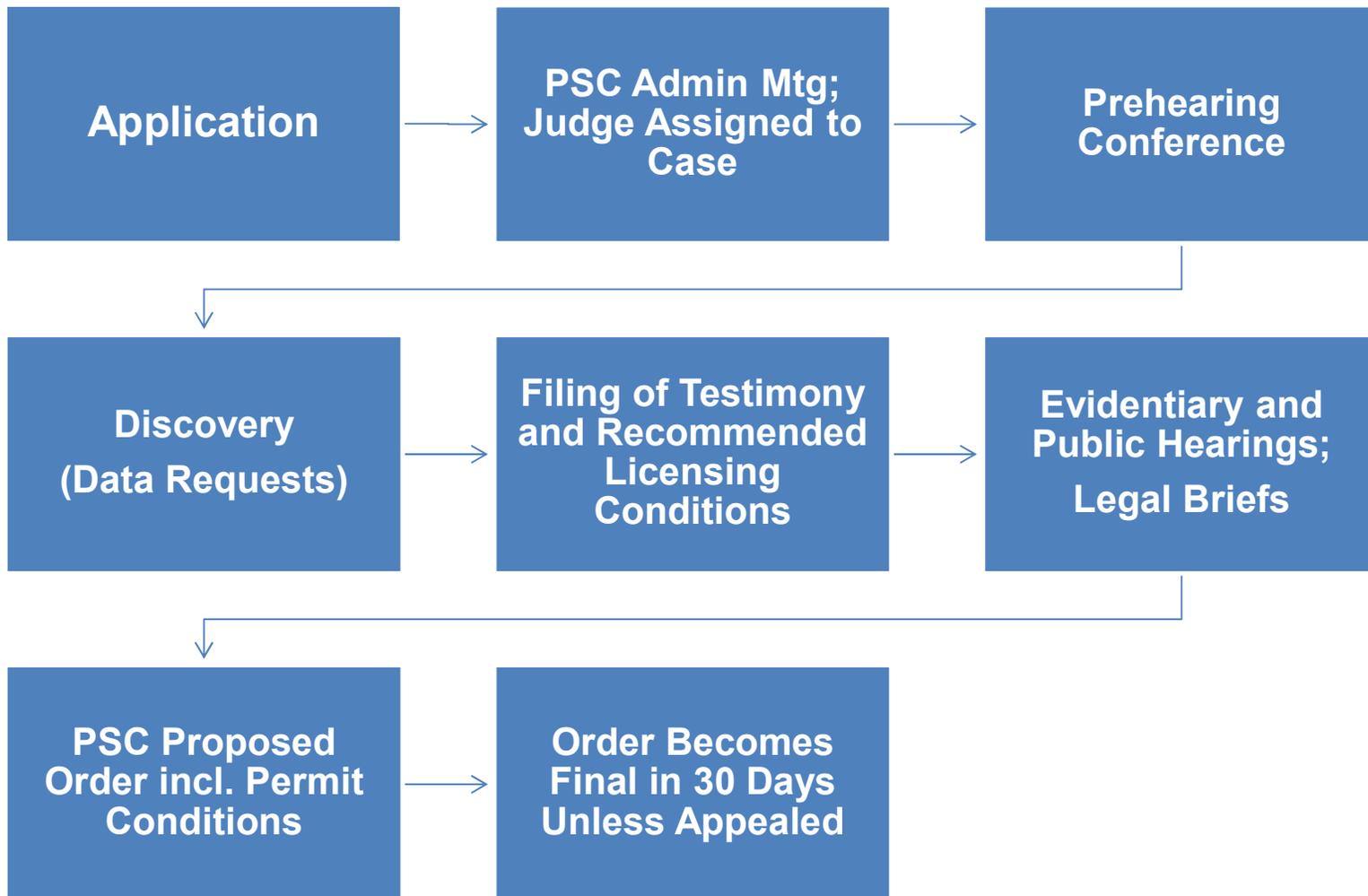
To construct and operate a new power plant in Maryland (>2 MW) or a transmission line (>69 kV) a person must obtain:

- PJM Interconnection Agreement
- Public Service Commission Certificate of Public Need and Necessity (CPCN)
- Other State and Federal Permits
- County Permits

CPCN Adjudicatory Parties



CPCN Process



PPRP Coordinates With 7 State Agencies



Coordinated review concludes with a joint secretarial letter to the Public Service Commission, transmitting

- Project Assessment Report
- Recommended Licensing Conditions for the CPCN
- Testimony

Impact Assessment



How does the design, construction and operation of power plants and transmission lines impact Maryland's environmental, socioeconomic and cultural resources?

Impact Assessment



- Biological impacts to water quality, wetlands, forests, wildlife and aquatic resources
- Economic and fiscal impacts, including job creation and protecting prime farmland
- Transportation impacts during construction, and after construction to passing cars and planes
- Visual impacts to neighboring properties
- Impacts to cultural, historical and aesthetic sites
- Water and sewer utility impacts
- Fire safety considerations

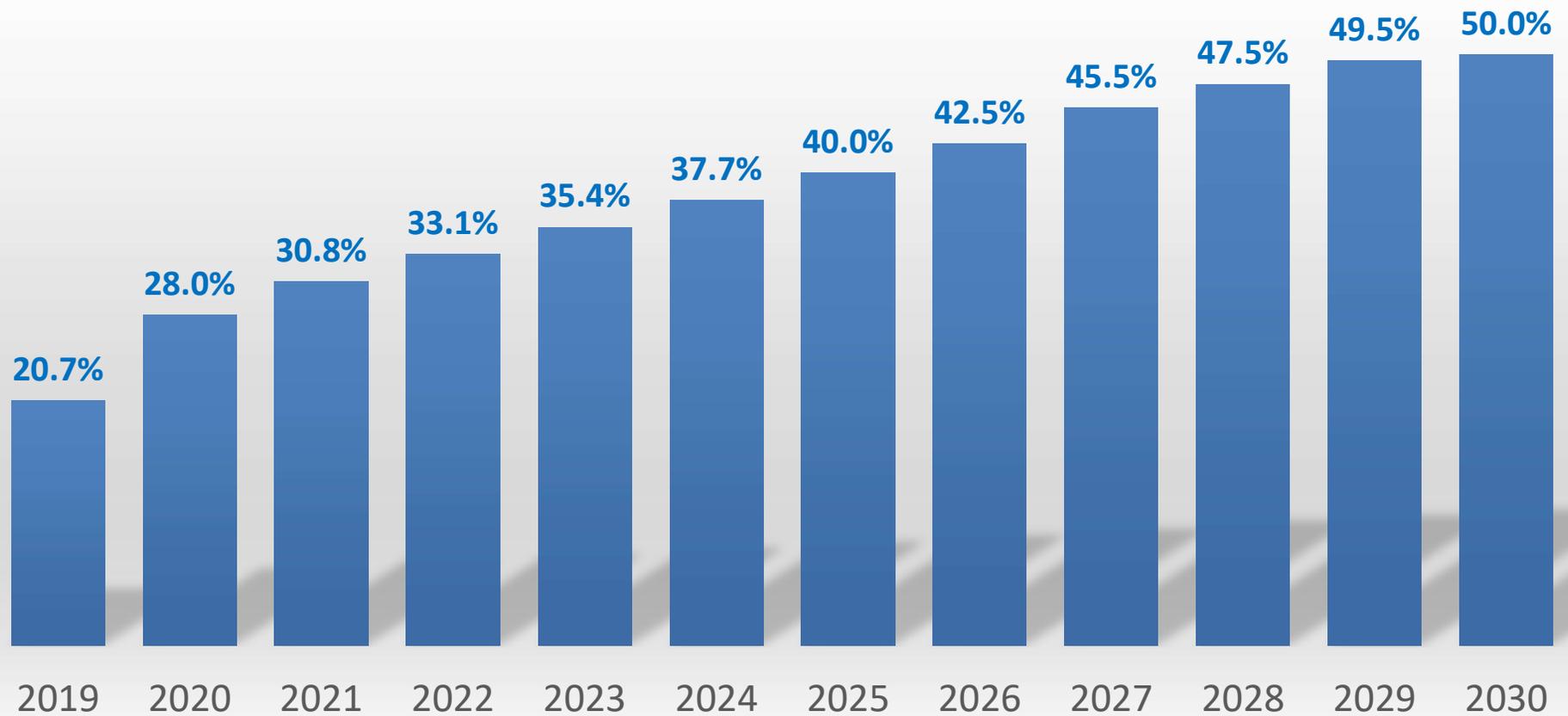
PSC Determination



Public Utilities Articles § 7-207(e): The PSC must give due consideration to the following:

- (1) The recommendation of the governing body of the county or municipal corporation
- (2) The effect of the generating station on:
 - (i) Stability & reliability of the grid;
 - (ii) Economics;
 - (iii) Esthetics and historic sites;
 - (iv) Environmental;
 - (v) Safety (e.g., aviation safety)
- (3) Consistency with comprehensive plan / zoning; efforts to resolve any issues presented by a county.

2019 Clean Energy Jobs Act: Renewable Goals (%)



Anticipating Solar Development



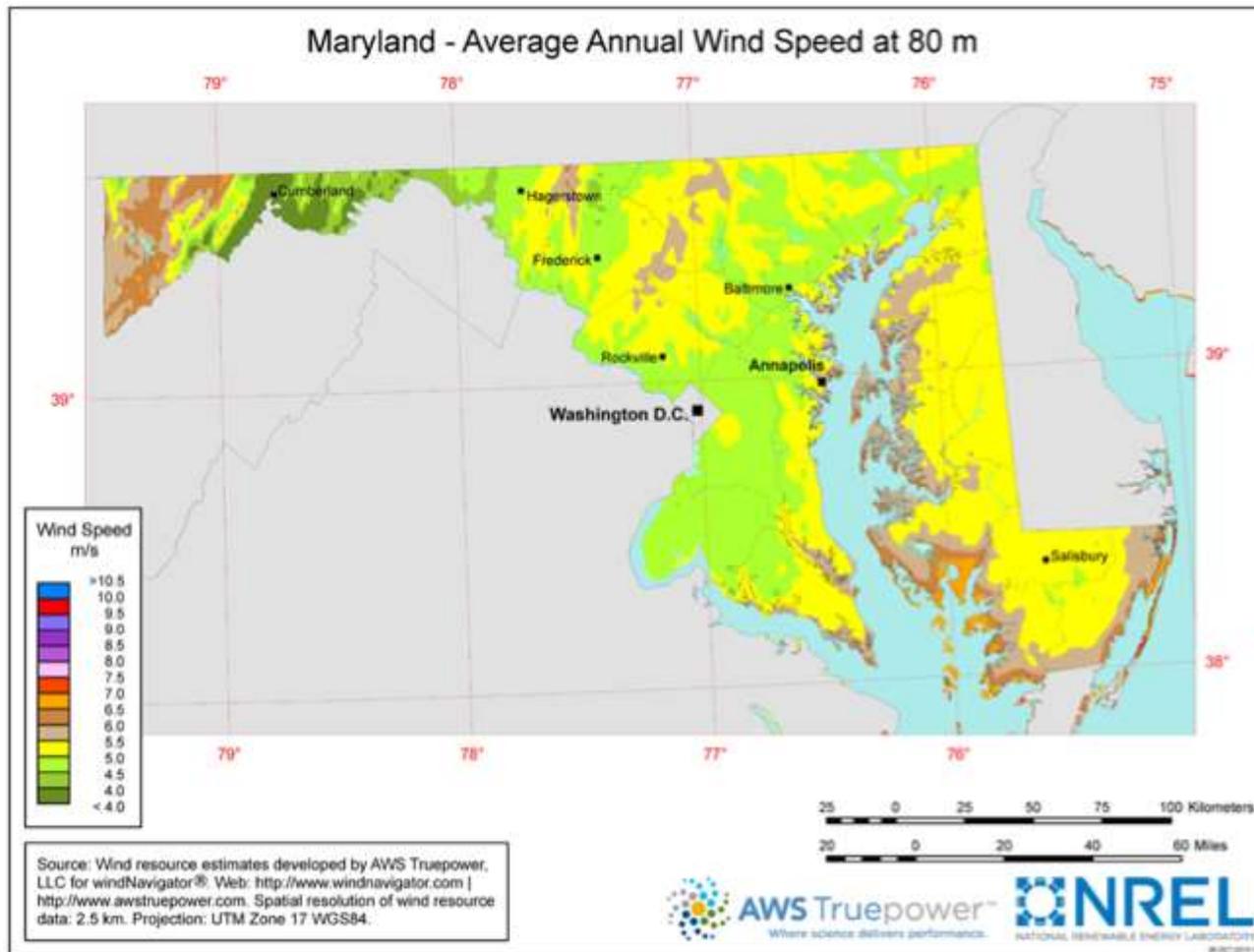
Land Required to Fulfill 14.5% Solar Carve-Out Requirements

Solar capacity required to meet generation requirement (MW)	5,000
Land requirements at five acres per MW (acres)	25,000

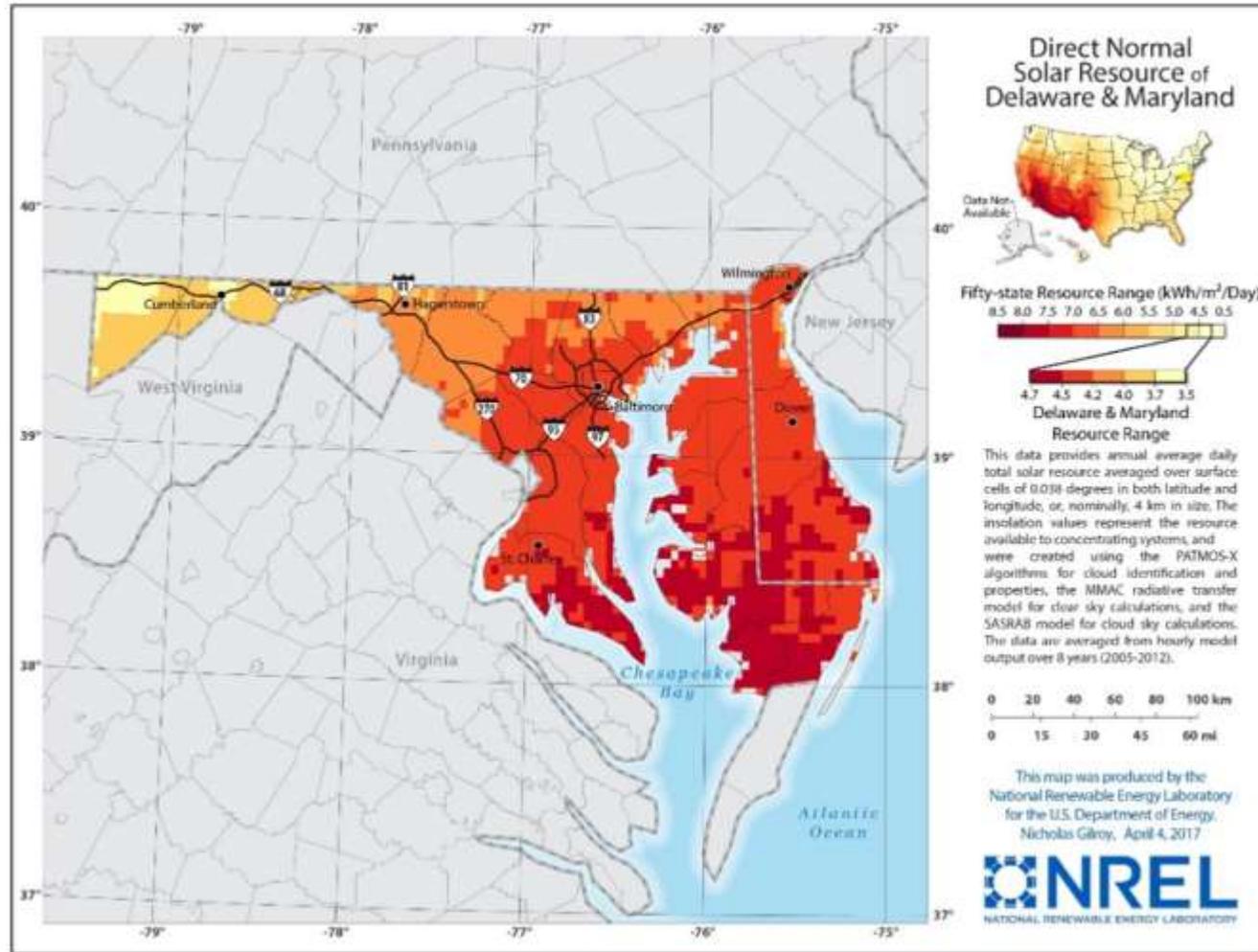
Smart Siting



Renewable Resource Availability - Wind



Renewable Resource Availability - Solar



SmartDG+

Purpose



- SmartDG+ is a free, online, GIS-based screening tool sponsored by MEA and PPRP.
- It is intended to help developers and officials identify areas for the location of new wind and solar projects in Maryland.
- Focus is for projects greater than 2 MW—i.e., bigger than rooftop solar.

SmartDG+ Development Process



- Met with county and utility officials to discuss local priorities and policies of relevance
- Evaluated electrical lines throughout Maryland
- Gathered publicly available data on barriers to project construction

SmartDG+

Data Layers



Infrastructure

Proximity

- Electricity lines

Renewable Resource

Availability

- Viable wind speeds
- Solar

Land Suitability

- Protected areas
- Flood zones
- Land cover/land use
- Airports
- DOD no-go zones
- County zoning

SmartDG+

Additional Screens



- County-level zoning
- County-level protected areas
- NAS Patuxent River Protected Areas
- MALPF easements
- Forested lands

SmartDG County Zoning Guide



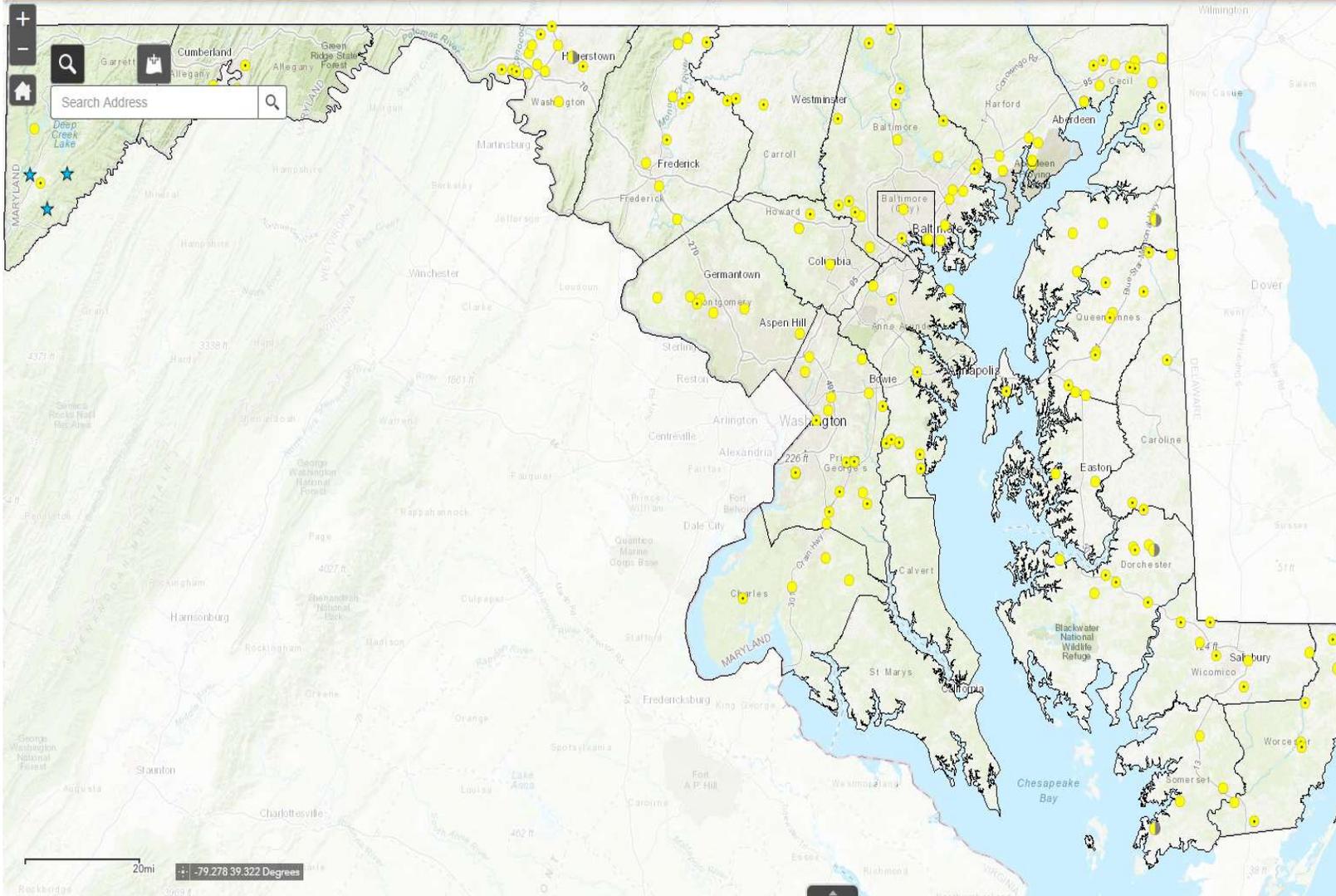
- The County Zoning Guide is a compilation of all relevant county zoning language that addresses renewable energy projects that are 2 MW or above.
- A link to the guide is found on SmartDG+ homepage.
- The document is currently being updated to maximize user-friendliness.

County Zoning 2018	
<u>County:</u> Allegany	<u>Last Updated</u> 9/23/2018
<u>Zoning Regulations as of:</u> 4/24/2017	
<u>Solar</u>	<p>Large-scale solar projects are referred to as "primary use" solar energy systems in Allegany County's zoning code.</p> <p>Chapter 360: Land Development, Part 4 Zoning. Definition for "SES" and "SES as Primary Use" (Section 360-59). Supplementary use regulations for "SES as primary use" (Section 360-109). Table of Permissible Uses (Attachment 2 - Table 1).</p>
<u>Wind</u>	<p>For Allegany County, Industrial Wind Farms are defined as a cluster of Industrial Wind Energy Conversion Systems (IWECS). Both IWECS and Industrial Wind Farms have the same zoning regulations.</p> <p>Chapter 360: Land Development, Part 4 Zoning. Definition for "IWECS", "Industrial Wind Farms", "Wind Energy Device", and "Wind Turbine" (Section 360-59). Supplementary use regulations for IWECS (Section 360-107) and Industrial Wind Farms (Section 360-108). Table of Permissible Uses (Attachment 2 - Table 1).</p>
<u>Small Solar</u>	<p>Small-scale solar projects are referred to as "accessory projects" in Allegany County's zoning code. Solar Energy Systems (SES) utilizing thermal production energy are also classed under accessory use for our purposes.</p> <p>Chapter 360: Land Development, Part 4 Zoning. Definition of "SES" (Section 360-59). Supplementary use regulations for residential use (Section 360-111) and nonresidential use (Section 360-112) of accessory SES. SES utilizing thermal production of energy (Section 360-112). Table of Permissible Uses (Attachment 2 - Table 1).</p>
<u>Small Wind</u>	<p>The Allegany County zoning code does not have specific zoning districts designated for small-scale/accessory wind projects. However, the zoning code does mention information regarding the height and setback distance of these projects.</p> <p>Chapter 360: Land Development, Part 4 Zoning. Definition for Domestic Wind Energy Device, Wind Energy Device, Wind Turbine, Agricultural Wind Energy Devices (Section 360-59). Description of 'Special Setback and Height Requirements' for Wind Energy Conversion Systems (Attachment 3 - Table 4).</p>
<u>General Generation</u>	<p>There are no mentions of zoning guidelines for other types of renewable generation.</p> <p>No document available for viewing.</p>
<u>Comprehensive Plan</u>	<p>There are no explicit mentions in Allegany County's CMP of recommendations for land use or facilitating the development of large-scale renewable energy facilities.</p> <p>No important land use definitions, stipulations, or recommendations pertaining to large-scale renewable energy facilities within document.</p>
<u>Other DG</u>	<p>The Allegany Board of County Commissioners passed legislation in March of 2017 allowing business owners in the county to take advantage of Maryland's Commercial Property Assessed Clean Energy (MD-PACE) program.</p> <p>Maryland Commercial Property Assessed Clean Energy (MD-PACE) program website.</p> <p>Allegany County does not have available electronic versions of the MD-PACE legislation.</p>

SmartDG+ Example Product



SmartDG+ A Screening Tool for 2+ MW Distributed Generation and Renewable Energy Projects



Legend

Smart DG+ (Expand to see Data Layers)

Current Wind & Solar Projects (1+ MW)

- Solar Site - Operational
- Solar Site - Proposed
- Solar Site - Under Construction
- Wind Site - Operational

Resources



More information available at the Power Plant Research Program website:

www.dnr.maryland.gov/pprp

Program Contact:

David Tancabel, PPRP Director
Tawes Office Building, B-3
410-260-8691
David.Tancabel@maryland.gov